SECRET

DO/SS 74-060

MEMORANDUM FOR : Deputy to the DCI for the Intelligence Community

SUBJECT : Coping with the Information Handling Problem

REFERENCE : Your memo to the Deputies dtd 12 Feb 74, same subject with attachments [   ] and [   ]

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1. The Directorate of Operations' historic position on Community information exchange, networking, COINS, most USIB Information Handling Committee matters and the like has been that we are interested technically, are probably minimally involved and, where involved, have fundamental operational security constraints to consider. All three points are still valid, but there are future possibilities which make it logical, I think, for the DO to be more actively involved in CIA networking discussions than in the past. One such interest is in how technology can help support our stations overseas, with significant telecommunications and teleprocessing implications.

2. The principal focus of the Community network discussions to date has been, it seems to me, on substantive information distribution, retrieval or exchange; to a lesser extent, there has been recent discussion of Community resource management data availability. In earlier days, there was much talk of the "biographic problem" which, I gather, was never terribly well defined; the considerable debate which ensued dealt mainly with positive intelligence files, with less emphasis on counterintelligence and operations support name tracing systems. The latter, of course, are our primary interest. We are looking to improvements in meeting our counterintelligence Community responsibilities under NSCID 5; these may include remote query systems to automate at least the negative responses, which constitute, by far, the majority. We are, and have been, happy to share technical experience, including software, but have found often that our system, which for historic reasons is unique, is beyond what most others have wanted.

3. Given the magnitude of the resources involved in the Community information handling world, I should think the Director would want to have a knowledgeable officer reporting to him. Having said that,

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I will address each of your recommendations (in[   ]   25X1
in turn. I also attach, as potentially useful, a statement
by the Chief, Services Staff who, as you know, has had long
exposure to this subject.

    Recommendation 10.a - Concur with assignment of a
knowledgeable officer to the IC Staff, but would be
skeptical of someone from industry totally unfamiliar
with the problem. Also, would limit his role to advisor,
not project officer (see 10.e. below).

    Recommendation 10.b - Concur in principle but with
qualifications, i.e. the advisor should be able to call
together a Steering Group as necessary. The problem
is extremely complex but there is no product in the
DDS&T project sense.

    Recommendation 10.c - Concur that the IHC can and should
provide staff support to the advisor. Am not sure that
the current IHC Staff needs augmentation to perform the
appropriate staff support.
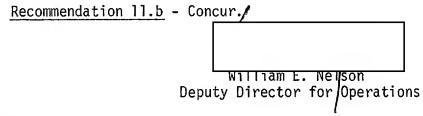
    Recommendation 10.d - Concur.

    Recommendation 10.e - See attached paper by C/SS for
rationale behind the following (particularly paras 6-9):

This is the essence of the DCI's advisor role. As with
collection or production activities in the Community, the
DCI needs to know the "what, how, why and how well" of
information handling. This means that he does need a
current assessment of the degree of automation extant,
of flow patterns, costs, etc. I do not suggest another
SCIPS study. I do feel the logic of the basic theme in
the attached, i.e. that if the DOD systems can be tied
together more effectively, the DCI realizes significant
management gain, since I understand that 85% of the
resources are in DOD. There is no need for a single
System, but there is need for better Community planning
within a System-of-systems context.

    Recommendation 11.a - Concur with advising USIB and
IRAC of DCI personal commitment but strongly non-concur

in putting a hold on contracting and procurement in CIA or State. The rationale, again, is that the bulk of the problem is in DOD.

Recommendation 11.b - Concur.

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William E. Nelson
Deputy Director for Operations

Attachment

22 February 1974

MEMORANDUM FOR: Deputy Director for Operations

SUBJECT: IC Staff Paper: Coping with the Information Handling
                  Problem

REFERENCE: Memo to DD's fr D/DCI/IC dtd 12 Feb 74 plus attachments

      1. What I am about to reflect here may be useful to the Director
and to General Graham in attempting to bring perspective to this subject
in anticipation of a fairly negative reaction to the specific proposal--
particularly within the Agency. I have said it all before to individual
members of the IHC, to Jack Martin, Bill Baker and his PFIAB panel (hence
may have lost my objectivity or ability to convince), but I have not
written it.

      2. Awareness of the growing problem in unorchestrated information
systems growth in the Community goes back to the early 50's and the
first Ad Hoc Working Group on Information Processing (AHIP) of the
Intelligence Advisory Committee; this became CODIAC, then CODIB, now the
Information Handling Committee (IHC) of the USIB. Early focus was on
common report formats, numbering systems, index codes, and document
microphotography and the like. As computers entered the scene, costs
began to skyrocket and the logic of informed Community planning became
apparent, particularly because then new technical collection systems
design and support necessitated consideration of the processing
implications of the collected product.

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      3. By this time it was the early 60's and the Chairman of CODIB
[   ]) set in motion essentially (and ironically and frustratingly)
what is being suggested now, viz., DCI recognition of a significant
management problem and some planning for dealing with it. A System-of-
Systems concept was exactly what was in [   ]s mind. A Steering Group/ **25X1**
Task Force/Working Group was established under a "project" officer; it
consisted of full-time senior representatives from the USIB agencies plus
contractors. It devoted over a year to an exhaustive inventory (with
the collected data key punched for machine manipulation and analysis)
of who does what, where, how and with what, with particular focus on
how much automation already existed. This was the controversial and
much maligned SCIPS Study (Staff for the Community Information Processing
Study). The report ran to seven volumes. It was, in effect, Phase I,

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7. There is no doubt that the DOD is convinced of the mandatory need for information networks now. And I agree that they have and have had such a need for some time: to link the Services together and to DIA and NSA and to support the U&S Commands. DOD is going in at least three major and different directions in their network developments: COINS, the Intelligence Data Handling System (IDHS), and the World Wide Military Command & Control System (WWMCCS). They must orchestrate this; they must use intelligence and in real-time, tied to collection systems; the President has charged the DCI with Community management; so they look to the DCI.

8. In trying to articulate the major gain to the DOD and the DCI as Community manager through integrated planning within the DOD only, I have used the microphotography example. The fundamental purpose for developing microphotography was to save storage space. Ninety-five percent of document storage space can be saved by using a 20:1 size reduction ratio--a ratio long within the low-cost technological level. Dramatic further reductions are possible but to realize an additional 1-2% saving increases costs geometrically. DOD resources and costs in information handling represent, easily, 85% of the Community total. There is a requirement. There is also a single chain of command from the Secretary of Defense.

9. I submit that there is dramatic gain in concentrating on DOD information system integration. I also submit that continued pressure to force inclusion, and systems standards, on the civilian agencies will perpetuate frustration. On the simplest level, CIA can be involved as it is, with a terminal connection to DOD files. Far more complex is the CIA role via the Operations Center, in the early warning/crisis management world. I believe that the most important first step, leaving options open for future, more sophisticated involvement, is Agency cooperation in putting in the communication "pipes" to connect the USIB member agencies; these pipes should be large enough to permit sufficient cables to handle secure phones, ADP terminal-to-computer links, long distance xerography, computer-to-computer data transmission, telephone/video conferencing, map and photo transmission and the like.

10. The concept suggested has been considered by the IHC and the USIB Communications Working Group. A proposal was made, but not acted upon, that these two groups be merged, since we are talking now, in all cases, of telecommunications and teleprocessing. Since processing is integral to all the other USIB activities, one can argue that the IHC should be abolished. But since there is still relatively little understanding of this field by senior management,

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I suggest that the IHC be retained with the addition of a communication and a user focus (to broaden it beyond ADP only), as was proposed by Dick Scott before he retired.

11. I do not think an information czar, appointed to develop a single system as a project product, will get off the ground. Nor is one necessary. The DCI does need a knowledgeable advisor; this field involves huge resource numbers and can break the back of the collection systems if inefficiently conceived. Such a full time advisor would reflect personal DCI commitment. He could also ensure that the myth of non-available CIA files is shattered, thereby reducing pressure for immediate, total and standardized CIA involvement now. He could get his staff support from the IHC and could call up a Steering Group of Community experts (and outsiders) as required to size and analyze planning problems for recommendations to the Director. But the major immediate efforts would be SecDef line management efforts, coordinated to ensure DCI input, through the IC Staff advisor.

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Chief, Services Staff

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ROUTING AND RECORD SHEET

SUBJECT: (Optional)

FROM:		EXTENSION	NO.
DDO			DATE

TO: (Officer designation, room number, and building)	DATE		OFFICER'S INITIALS	COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)
	RECEIVED	FORWARDED		
1. Deputy to the DCI for Intelligence Community				— DDO needs assurance that we are not proposing systems that get deeply into his equities.
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